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What is claimed is:

1. A method for diagnosing the presence of prostate cancer or a gynecologic cancer in a patient comprising:

(a) measuring levels of ESBPII in cells, tissues or
5 bodily fluids in a patient; and

(b) comparing the measured levels of ESBPII with levels of ESBPII in cells, tissues or bodily fluids from a normal human control, wherein a change in measured levels of ESBPII in said patient versus normal human control is associated with
10 the presence of prostate cancer or a gynecologic cancer.

2. A method of diagnosing metastases of prostate cancer or a gynecologic cancer in a patient comprising:

(a) identifying a patient having a prostate cancer or a gynecologic cancer that is not known to have metastasized;

(b) measuring ESBPII levels in cells, tissues, or bodily
15 fluid from said patient; and

(c) comparing the measured ESBPII levels with levels of ESBPII in cells, tissue, or bodily fluid of a normal human control, wherein an increase in measured ESBPII levels in the
20 patient versus the normal human control is associated with a cancer which has metastasized.

3. A method of staging prostate cancer or a gynecologic cancer in a patient having prostate cancer or a gynecologic cancer comprising:

(a) identifying a patient having prostate cancer or a
25 gynecologic cancer;

(b) measuring ESBPII levels in cells, tissue, or
bodily fluid from said patient; and

(c) comparing measured ESBPII levels with levels of
30 ESBPII in cells, tissues, or bodily fluid of a normal human control, wherein an increase in measured ESBPII levels in said patient versus the normal human control is associated with a cancer which is progressing and a decrease in the measured

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ESBPPII levels is associated with a cancer which is regressing or in remission.

4. A method of monitoring prostate cancer or a gynecologic cancer in a patient for the onset of metastasis comprising:

- (a) identifying a patient having prostate cancer or a gynecologic cancer that is not known to have metastasized;
- (b) periodically measuring levels of ESBPPII cells, tissues, or bodily fluid from said patient; and
- 10 (c) comparing the periodically measured ESBPPII levels with levels of ESBPPII in cells, tissues, or bodily fluid of a normal human control, wherein an increase in any one of the periodically measured ESBPPII levels in the patient versus the normal human control is associated with a cancer which has
- 15 metastasized.

5. A method of monitoring the change in stage of prostate cancer or a gynecologic cancer in a patient comprising:

- (a) identifying a patient having prostate cancer or a
- 20 gynecologic cancer;
- (b) periodically measuring levels of ESBPPII in cells, tissues, or bodily fluid from said patient; and
- (c) comparing the periodically measured ESBPPII levels with levels of ESBPPII in cells, tissues, or bodily fluid of
- 25 a normal human control, wherein an increase in any one of the periodically measured ESBPPII levels in the patient versus the normal human control is associated with a cancer which is progressing in stage and a decrease is associated with a cancer which is regressing in stage or in remission.

30 6. The method of claim 1, 2, 3, 4 or 5 wherein the ESBPPII comprises SEQ ID NO:1 or SEQ ID NO:2.

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7. A method of imaging prostate cancer or a gynecologic cancer in a patient comprising administering to the patient an antibody which specifically binds to ESBPII.

8. The method of claim 7 wherein said antibody is labeled with paramagnetic ions or a radioisotope.

9. A method of treating prostate cancer or a gynecologic cancer in a patient comprising administering to the patient an antibody which specifically binds to ESBPII.

10. The method of claim 9 wherein the antibody is conjugated to a cytotoxic agent.

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